

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) A method of ~~communications~~ transmitting a payload of data bits, comprising:

encoding the payload of data bits to generate a data packet containing systematic symbols replicating the data bits and redundancy symbols;

transmitting a first ~~signal~~ subpacket containing the systematic symbols and a first portion of the redundancy symbols to a remote location;

~~determining a target transmission energy level as a function of a target quality parameter at the remote location;~~

~~computing a second energy level as a function of the target transmission energy level and the first energy level; and~~

in response to receiving a NAK message from the remote location, transmitting a second ~~signal~~ subpacket containing a second portion of the redundancy symbols to the remote location in accordance with a transmission format selected as a function of a computed expected total energy received at the remote location due to transmission of the first subpacket at the ~~second energy level~~.

2. (Currently Amended) The method of claim 1 wherein the ~~determination of the target transmission energy level~~ expected total energy received at the remote location due to transmission of the first subpacket is computed as a function of a number of symbols expected to have been received at the remote location ~~the first and second signals~~.

3. (Currently Amended) The method of claim 2 wherein the ~~first and second signals each comprises a plurality of symbols, and wherein the determination of the target transmission energy level is~~ transmission format is selected as a function of the computed expected total energy received at the remote location due to transmission of the first subpacket and the total number of symbols in the first and second ~~signals~~ subpackets.

4. (Currently Amended) The method of claim 1 wherein the ~~second energy level~~ transmission format is further selected ~~is further adjusted~~ as a function of expected losses at the remote location related to decoding the first and second ~~signals~~ subpackets jointly.

5. (Currently Amended) The method of claim 1 wherein the ~~second energy level~~ expected total energy received at the remote location is ~~further~~ adjusted as a function of expected losses at the remote location relating to de-mapping the ~~second signal~~ first subpacket.

6. (Currently Amended) The method of claim 1 wherein the ~~first signal comprises a first subpacket from a data packet, and the second signal comprises a second subpacket from the same data packet, and wherein the~~ transmission format is selected based on determination of the ~~a target transmission energy level is computed as~~ a function of a coding rate of the combined first and second subpackets.

7. (Currently Amended) The method of claim 1 wherein the first ~~signal~~ subpacket is transmitted at a first coding rate, and the second ~~signal~~ subpacket is transmitted at a second coding rate higher than the first coding rate.

8. (Currently Amended) The method of claim 1 wherein the ~~computation of the second energy level~~ transmission format is further selected as a function of feedback from the remote location relating to wireless channel quality.

9. (Currently Amended) The method of claim 1 wherein the ~~computation of the second energy level~~ transmission format is selected as a function of ~~[[the]]~~ a target transmission energy level corresponding to a potential transmission format and the ~~first energy level~~ computed expected total energy received at the remote location due to transmission of the first subpacket adjusted by expected losses at the remote location relating to de-mapping the first signal.

10. (Currently Amended) The method of claim 9 wherein the ~~computation of the second energy level comprises~~ transmission format is selected by:

subtracting the adjusted first energy level computed expected total energy received at the remote location due to transmission of the first subpacket from the target transmission energy level for the potential transmission format;

computing a retransmission energy for the potential transmission format; and

eliminating the potential transmission format from consideration if the computed retransmission energy exceeds a threshold level.

11. (Currently Amended) The method of claim ~~[[1]]~~ 8 wherein the ~~quality parameter feedback~~ comprises an error rate at the remote location.

12. (Currently Amended) A communications apparatus for transmitting a payload of data bits encoded in a data packet as a plurality of systematic symbols and redundancy symbols, comprising:

a transmitter configured to transmit to a remote location a first signal subpacket containing the systematic symbols and a first portion of the redundancy symbols at a first energy level followed by a second signal subpacket containing a second portion of the redundancy symbols at a second energy level; and

a processor configured to ~~determine~~ select a target transmission format for the second subpacket energy level as a function of a computed level of expected energy received at the remote location due to transmission of the first subpacket target quality parameter at the remote location, and compute the second energy level as a function of the target transmission energy level and the first energy level.

13. (Currently Amended) The communications apparatus of claim 12 wherein the processor is further configured to ~~determine the target transmission energy level~~ compute the level of expected energy received at the remote location due to transmission of the first subpacket as a function of the number of symbols contained in the first and second signals subpacket.

14. (Currently Amended) The communications apparatus of claim 13 ~~wherein the first and second signals each comprises a plurality of symbols, and~~ wherein the processor is further configured to ~~determine the~~ compute a target transmission energy level as a function of the total number of symbols contained in the first and second ~~signals~~ subpackets.

15. (Currently Amended) The communications apparatus of claim ~~[[12]]~~ 14 wherein the processor is further configured to adjust the ~~second energy level~~ target transmission energy level as a function of expected losses at the remote location related to decoding the first and second ~~signals~~ subpackets jointly.

16. (Currently Amended) The communications apparatus of claim 12 wherein the processor is further configured to adjust the ~~second energy level~~ computed level of expected energy received at the remote location due to transmission of the first subpacket as a function of expected losses at the remote location relating to de-mapping the ~~second signal~~ first subpacket.

17. (Currently Amended) The communications apparatus of claim ~~[[12]]~~ 14 wherein ~~the first signal comprises a first subpacket from a data packet, and the second signal comprises a second subpacket from the same data packet, and~~ wherein the processor is further configured to ~~determine~~ compute the target transmission energy level as a function of a coding rate of the combined first and second subpackets.

18. (Currently Amended) The communications apparatus of claim 12 further comprising ~~[[a]]~~ an encoder configured to encode the first ~~signal~~ subpacket at a first coding rate and the second ~~signal~~ subpacket at a second coding rate higher than the first coding rate.

19. (Currently Amended) The communications apparatus of claim 12 wherein the processor is further configured to compute the ~~second energy level~~ level of expected energy received at the remote location due to transmission of the first subpacket as a function of feedback from the remote location relating to wireless channel quality.

20. (Currently Amended) The communications apparatus of claim ~~[[12]]~~ 14 wherein the processor is further configured to ~~compute the second energy level~~ select the transmission format as a function of the target transmission energy level and the ~~first energy level~~ computed level of expected energy received at the remote location due to transmission of the first subpacket adjusted by expected losses at the remote location relating to de-mapping the first ~~signal~~ subpacket.

21. (Currently Amended) The communications apparatus of claim 20 wherein the processor is further configured to ~~compute the second~~ a retransmission energy level by subtracting the adjusted ~~first energy level~~ computed level of expected energy received at the remote location due to transmission of the first subpacket from the target transmission energy level.

22. (Currently Amended) The communications apparatus of claim ~~[[12]]~~ 19 wherein the ~~quality parameter~~ feedback comprises an error rate at the remote location.

23. (Currently Amended) A communications apparatus for transmitting a payload of data bits encoded in a data packet as a plurality of systematic symbols and redundancy symbols, comprising:

means for transmitting to a remote location a first ~~signal~~ subpacket containing the systematic symbols and a first portion of the redundancy symbols at a first energy level followed by a second ~~signal~~ subpacket containing a second portion of the redundancy symbols at a second energy level;

determining means for determining a target transmission energy level as a function of a ~~target quality parameter~~ computed level of expected energy received at the remote location; and

means for ~~computing the second energy level~~ selecting a transmission format for the second subpacket as a function of the target transmission energy level ~~and the first energy level~~.

24. (Currently Amended) The communications apparatus of claim 23 wherein the determination of the target transmission energy level by the determining means is further a function of characteristics of the first and second signals subpackets.

25. (Currently Amended) The communications apparatus of claim 24 ~~wherein the first and second signals each comprises a plurality of symbols, and~~ wherein the determination of the target transmission energy level by the determining means is further a function of the total number of symbols contained in the first and second signals subpackets.

26. (Currently Amended) The communications apparatus of claim 23 ~~wherein the first signal comprises a first subpacket from a data packet, and the second signal comprises a second subpacket from the same data packet, and~~ wherein the determination of the target transmission energy level by the determining means is further a function of a coding rate of the combined first and second subpackets.

27. (Currently Amended) The communications apparatus of claim 23 further comprising means for encoding the first ~~signal~~ subpacket at a first coding rate and the second ~~signal~~ subpacket at a second coding rate higher than the first coding rate.